

Revised 10/03

CORRESPONDENCE  
INCOMING LTR NO

01071 RF03

DUE DATE  
ACTION

| DIST             | LTR | END |
|------------------|-----|-----|
| BERARDINI, J. H. | X   | X   |
| BOGNAR, E. S.    | X   | X   |
| BROOKS, L.       | X   | X   |
| BUTLER, I.       | X   | X   |
| CARPENTER, M.    | X   | X   |
| CROCKETT, G. A.  | X   | X   |
| DECK, C. A.      | X   | X   |
| DEGENHART, K. R. | X   | X   |
| DIETER, T. J.    | X   | X   |
| DIETERLE, S. E.  | X   | X   |
| FERRERA, D. W.   | X   | X   |
| GIACOMINI, J. J. | X   | X   |
| LINDSAY, D. C.   | X   | X   |
| LONG, J. W.      | X   | X   |
| LYLE, J. L.      | X   | X   |
| MARTINEZ, I. A.  | X   | X   |
| NAGEL, R. E.     | X   | X   |
| NESTA, S.        | X   | X   |
| NORTH, K.        | X   | X   |
| PARKER, A. M.    | X   | X   |
| RODGERS, A. D.   | X   | X   |
| SHELTON, D. C.   | X   | X   |
| SPEARS, M. S.    | X   | X   |
| TRICE, K. D.     | X   | X   |
| TUOHY, N. R.     | X   | X   |
| WIEMELT, K.      | X   | X   |
| WILLIAMS, J. L.  | X   | X   |
| ZAHM, C.         | X   | X   |

|                |   |   |
|----------------|---|---|
| CORRESPONDENCE | X | X |
| ADMIN. RECORD  | X | X |
| PATS/130       | X | X |

Reviewed for Addressee  
Corres Control RFP

11/20/03  
Date By

Ref Ltr #

DOE ORDER #

54001

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STATE OF COLORADO

Bill Owens, Governor  
Douglas H. Benedict, Executive Director

CORRESPONDENCE  
CONTROL

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department  
of Public Health  
and Environment

<http://www.cdphe.state.co.us>

November 20, 2003

Mr. Joseph Legare  
Assistant Manager for Environment and Stewardship  
U.S. Department of Energy  
Rocky Flats Field Office  
10808 Highway 93, Unit A  
Golden, Colorado 80403-8200

RE Approval, Industrial Area Sampling and Analysis Plan, FY04 Addendum #IA-04-04, IHSS Group 100-1, UBC 122 (Medical Facility) and IHSS 000-121 Tank T-1 (OPWL), November 2003

Dear Mr. Legare

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) hereby approves the subject document. A comment resolution meeting on November 13, 2003 was successful in resolving the Division's written comments on the initial document. Those comments are attached for reference.

Please show the locations of the sanitary drain lines, and the Tank T-1 waste line, on the appropriate, final figure(s). While we agree that sampling along the sanitary line may not be advantageous at present, the Division believes that the removal of the slab may reveal locations that should be sampled. Similarly, any joint or crack locations, obscured by floor coverings, should be considered for sampling through the consultative process.

As the second review was conducted from electronic submittals, please submit the entire document, showing the approval date, for the administrative record.

If you have any questions regarding this correspondence, please contact me at (303) 692-3367, Harlen Ainscough at 303-692-3337 or David Krueck at 303-693-3328.

Sincerely,

Steven H. Gunderson  
RFCA Project Coordinator

Attachment

cc Mark Aguilar, EPA  
Norma Castaneda, DOE  
Lane Butler, KH

Mark Sattelberg, U.S.F.W.  
Dave Shelton, KH  
Administrative Records Building T130G



DOCUMENT CLASSIFICATION  
REVIEW WAIVER PER  
CLASSIFICATION

H\RFETS\100-1 (UBC 122, Tanks T-1) SAP Addendum Approval doc

ADMIN RECORD

LA-A-001834

**Colorado Department of Public Health and Environment**

**Hazardous Materials & Waste Management Division**

**Comments**

**Draft Industrial Area**

**Sampling and Analysis Plan**

**FY04 Addendum #IA-04-04**

**IHSS Group 100-1**

**UBC 122 (Medical Facility) and IHSS 000-121 Tank T-1 (OPWL)**

**October 2003**

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**General Comments:**

1. The Division believes this SAP Addendum does not adequately consider the specific location of activities that occurred in Building 122 that then may have been a source of contaminants beneath the building or at the location of Tank T-1. Considering that the building remains standing, and was in use until September 2003, no apparent effort has been made to identify (through interviews or inspection), where contaminants may have been introduced into the building nor how constituents may subsequently have been released to the environment through drains, waste lines or floor joints. Much more information should be available, and could be applied to derive a sampling plan, than is evident from the addendum. This includes consideration of COCs other than radionuclides that may have been introduced to the building from contaminated workers or as part of the building's processes.
2. A D&D RISS Facility Characterization, Historical Site Assessment Report, dated August 2002, provides information not reflected in the SAP Addendum or Appendix C of the IASAP. For example, Appendix C discusses some of the research activities and function that occurred in Building 122, but provides only implied information on possible constituents, and no information on contaminant, or waste, disposal. The discussion on Tank T-1 provides no information on how "waste streams" from Building 122 were placed in the tank, i.e. by a pipeline or in batch quantities by personnel. Following is some of the most significant information provided by the RISS Report (parenthetical information as been added for clarification or consideration.)

The body counting rooms of Building 122 have steel walls constructed with lead, tin and zinc.

Building 122 has a plant sanitary and a site waste process system (NPWL, see below). The NPWL line was grouted in July 2002.

Major waste-generating processes in Building 122 included X-ray development and medical/infectious waste generation.

Spent fixers (D011, silver) were collected in satellite collection areas. Developers (D002, possibly corrosive, if undiluted) were washed down the sanitary drain (were pipes made of corrodible material).

Decontamination water was released to the process waste system (NPWL) and sent to Building 374.

Medical/infectious wastes were segregated as low-level or non-radioactive wastes.

Low-level medical wastes were placed in an appropriate container after being rendered non-infectious.

Sources, for which there is no history of leaks, were stored in Room 128D

Room 109 was used to develop X-rays and was the location of the satellite accumulation area for spent fixers

The entryway and some support rooms were contaminated with low-level Pu in 1964 resulting from the treatment and decontamination of a Building 776 worker. Decontamination of Building 122 was performed to the "standards of the day" and included tile removal and a new floor in the original shower area

The cadaver table in Room 119 and the decontamination shower in Room 127A have (or had) fixed contamination labels

Building 122 was never connected to the (OPWL) Building 122's process waste system was connected to the (NPWL) in the late 1970's

Process waste from Building 122 drained to an above ground Tank, T-1 This waste was pumped to a truck and transported to B-774 for treatment

Tank T-1 was removed in the early 1980s

Building 122 is (was) posted as potentially containing asbestos, the Industrial Hygiene Group has collected some asbestos data on Building 122

The building is not on a list of known beryllium areas, however there have been no recent Be samples collected

Lead in paint may be an issue and the body counting and X-ray rooms have (had) lead shielding in the walls (D008, lead)

No RCRA/CERCLA or PCB spills (old X-ray equipment may have contained PCB Oils) are reported to have occurred in Building 122

3. The D&D information identifies at least one major contamination incident where decontamination of the building surfaces including removal of floor tiles occurred. As such, this incident, as well as possible less high profile contamination incidents that may have occurred over the past 50 years, may need to be investigated for possible UBC concerns

#### Specific Comments:

4. Section 1.0, 2<sup>nd</sup> paragraph - With the activities described having continued until September 2003, the Division believes more biased sample locations can be defined through interviews and inspection.
5. Sinks and showers, especially those that supported decontamination procedures, should be identified and considered for biased sampling at pipe joints and any potential line breaks
6. 4<sup>th</sup> paragraph - Tank T-1 is described as an underground tank, however, the RISS Report described the tank as above ground. This would be significant as to sampling depth and the buildings drain line to the tank (above or below grade)
7. Table 1 - Silver, lead, tin, zinc, beryllium and PCBs should be considered as candidate PCOCS based on the RISS Report
8. Figure 2 - Please clarify if the three rectangular boxes at the south end of Building 122 are water mains, as the legend suggests. They do not appear to be connected to anything
9. Section 3.0, - 1<sup>st</sup> paragraph - State, and provide the rationale, for the two biased locations of UBC 122. The paragraph discusses only the IHSS 000-121 biased locations. Please add.

- 10      **Table 2** – Borings BT39-007 and 008 are shown as biased samples on Figure 3. The “IHSS/PAC/UBC Site” column describes them as Statistical Samples. Please correct.
- 11      **Figure 3** - The Division would prefer that biased samples be the primary means for gathering data on this building. If sufficient biased sample locations are identified, it may be possible to eliminate the three statistical samples that, alone, are insufficient in number. For example, BT38-005 may be redundant given the locations of the two biased samples in the building.